## PATENT COOPERATION TREATY

From ti	he NATIONAL SEARCHING AUTHO	DRITY	2 4 MAY 2005	DOT	
То:		REO'D	PCI	PCT	
	see form PCT/ISA/220		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 <i>bis</i> .1)		
			Date of mailing (day/month/year) see for	orm PCT/ISA/210 (second sheet)	
	cant's or agent's file reference form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below		
	national application No. //B2005/050183	International filing date (da 17.01.2005		Priority date (day/monthlyear) 20.01.2004	
	International Patent Classification (IPC) or both national classification and IPC G06F17/30				
Appli KON	Applicant KONINKLIJKE PHILIPS ELECTRONICS, N.V.				
1.	This opinion contains indications relating to the following items:				
	☑ Box No. I Basis of the o	oinion			
	☑ Box No. II Priority				
	☐ Box No. III Non-establish	ment of opinion with rega	ard to novelty, inventive	step and industrial applicability	
	T Box No. IV Lack of unity of	of invention	•		
	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			novelty, inventive step or industrial ment	
	☐ Box No. VI Certain docur				
	☐ Box No. VII Certain defec	ts in the international app	lication		
	☐ Box No. VIII Certain obser	vations on the internation	al application	·	
2.	FURTHER ACTION				
-	If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the international Bureau under Rule 66.1 bis(b) that written opinions of this international Searching Authority will not be so considered.				
	If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.				
	For further options, see Form F	PCT/ISA/220.			
з.	For further details, see notes to	Form PCT/ISA/220.	•		
	·				
Na.	me and mailing address of the ISA:		Authorized Officer	, seines Falonda	

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050183

		No. I	Basis of the opinion			
١.	With the la	regard anguag	I to the <b>language</b> , this opinion has been established on the basis of the international application in ge in which it was filed, unless otherwise indicated under this item.			
	l (	angua (under	Rules 12.3 and 23.1(b)).			
2.	With nece	Ith regard to any nucleotide and/or amino acid sequence disclosed in the international application and ecessary to the claimed invention, this opinion has been established on the basis of:				
	a. ty	pe of n	naterial:			
		] as	equence listing			
		l tab	le(s) related to the sequence listing			
	b. fo	rmat o	f material:			
		] in v	written format			
		j in d	computer readable form			
	c. tir	ne of f	iling/furnishing:			
		J co	ntained in the international application as filed.			
		] file	d together with the international application in computer readable form.			
		] fur	nished subsequently to this Authority for the purposes of search.			
3.	. 🗖	has b	dition, in the case that more than one version or copy of a sequence listing and/or table relating thereto een filed or furnished, the required statements that the information in the subsequent or additional is is identical to that in the application as filed or does not go beyond the application as filed, as priate, were furnished.			
4.	. Add	litional	comments:			
_	Box	k No. I	l Priority			
1	. 🖾	does	validity of the priority claim has not been considered because the International Searching Authority not have in its possession a copy of the earlier application whose priority has been claimed or, where red, a translation of that earlier application. This opinion has nevertheless been established on the mption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.			
2	<b>-</b>	hack	opinion has been established as if no priority had been claimed due to the fact that the priority claim been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international date indicated above is considered to be the relevant date.			
3	. Δde	ditiona	Lobservations, if necessary:			

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.: PCT/IB2005/050183

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

No:

1-20

No: Claims

Inventive step (IS)

Yes: Claims

Claims

Industrial applicability (IA)

Yes: Claims

1-20

1-20

No: Claims

2. Citations and explanations

see separate sheet

#### Re Item V.

- 1 Reference is made to the following document:
- D1: US 2003/229537 A1 (DUNNING TED E ET AL) 11 December 2003 (2003-12-11)
- D2: HUANG T.: "A Tough Match" PC MAGAZINE PCMAG.COM, 7 September 2003 (2003-09-07), XP002327130 Retrieved from the Internet: http://www.pcmag.com/article2/0,1759,1 651363,00.asp> [retrieved on 2005-04-29]
- D3: US-A-5 616 876 (CLUTS ET AL) 1 April 1997 (1997-04-01)
- D4: WO 02/31828 A (KONINKLIJKE PHILIPS ELECTRONICS N.V) 18 April 2002 (2002-04-18)
- D5: AUCOUTURIER J-J ET AL: "MUSIC SIMILARITY MEASURES: WHAT'S THE USE?" PROCEEDINGS ANNUAL INTERNATIONAL SYMPOSIUM ON MUSIC INFORMATION RETRIEVAL, October 2000 (2000-10), page COMPLETE, XP008014098
- D6: PAUWS S ET AL: "PATS: Realization and User Evaluation of an Automatic Playlist Generator" PROCEEDINGS OF 3RD INTERNATIONAL CONFERENCE ON MUSIC INFORMATION RETRIEVAL (ISMIR 2002), PARIS, FRANCE, 13 October 2002 (2002-10-13), 17 October 2002 (2002-10-17) pages 1-9, XP002325429 INSTITUT DE RECHERCHE ET COORDINATION ACOUSTIQUE ET MUSIQUE IRCAM CENTRE POMPIDOU, PARIS, FRANCE
- D7: WO 01/90926 A (NAPSTER, INC) 29 November 2001 (2001-11-29)

#### 2 INDEPENDENT CLAIM 1

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not inventive in the sense of Article 33(3) PCT.

  Document D1, regarded as the closest prior art, discloses (the references in parentheses applying to this document):
  - A system comprising:
  - a playlist generator that is configured to create a playlist (see "generation of track lists" in §211 l.1-4), and includes:
  - a) an artist similarity module that is configured to identify one or more similar artists to an identified artist to create an artist list (see §92, §117 l.9-11, §143 last four

lines, §211, §213 last two lines, §252, §257-§260, fig.11), and

- b) an item selector, that is configured to:
  - select a selected item associated with the similar artist from a source of items (see §92 I.12-15, §143 last four lines, §213 last two lines), and
  - include an identifier of the selected item in the playlist (as required in order to "generate the track lists" according to §211 I.1-4, as immediately and unambiguously derived by the skilled person).
- 2.2 The only difference between the disclosure of D1 and the subject-matter of claim 1 is that D1 does not explicitly teach "an artist selector (...) configured to select a selected artist from the artist list", and in consequence that tracks of the "selected artist" are selected in step b).
- 2.3 The problem to be solved by the present invention may therefore be regarded as how to constrain the set of results (recommended similar artists) searched and presented by the system of D1 (cf. §252, fig.11) to a reasonably small subset of artists being of real interest to the user.
- 2.4 The feature of providing a selector in the user interface to enable choosing from the list displayed (cf. fig. 11) in order to solve the said problem is a common general knowledge in the art. The skilled person would therefore regard it as a normal design option to include this feature in the system described in document D1 in order to solve the problem posed.

The subject-matter of claim 1 does therefore not meet the requirements of Article 33 (1) (3) PCT in respect of inventive step.

- 2.5 For the sake of completeness, it is pointed out that documents D2 and D3 disclose similar features and lack of inventive step of claim 1 could be also demonstrated using any one of said documents as the closest prior art.
- 3 INDEPENDENT CLAIM 13

Independent claim 13 contains only corresponding features to claim 1 and therefore it does not meet the requirements of Article 33 (1) (3) PCT in respect of inventive step for the same reasons as stated above.

### 4 INDEPENDENT CLAIMS 1, 13 AS IMPLEMENTATION OF HUMAN BEHAVIOUR

For the sake of completeness, it is pointed out that the method of claim 13 is anticipated by the known human practice of building a playlist (e.g. of MP3 tracks) manually, with usage of the memory (knowledge) of similar artists of the human being "executing" said method/practice and perhaps well known tools to search songs by author/title and add them to a playlist.

The current wording of claim 13 does not comprise any limitation as to automatic implementation of said method (e.g. in a computer). Consequently, its entirely manual execution falls in scope of said wording, thus anticipating it and even raising doubts as to the novelty of claimed subject matter (Article 33 (1)-(2) PCT).

However, even if said wording is interpreted as a computer-implemented method, a mere idea of automating human behaviour does not involve inventive step (Article 33 (1) (3) PCT). The same reasoning could be applied, mutatis mutandis, to the independent claim 1.

### 5 DEPENDENT CLAIMS 2-12, 14-20

- 5.1 The dependent claims 2-12, 14-20 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of Article 33(3) PCT in respect of inventive step, since these features are either known from or suggested by the prior art (cf. D1, D3, D4, D5) and/or specify merely common knowledge in the technical field.
- 5.2 For example, for claims 8, 9, 16, 17, consider the "matching closeness indicator" implemented as a slider in D3 col.16 l.5-15 and col.17 l.50 col.18 l.43.
- 5.3 For example, for claims 10 and 18 consider the "flexibility knob/slider" of D4 (see p.1

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

International application No.

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I.17- p.2 l.4) or the "AHA slider" of D5 (see §3.4.2 on p.4-5 and §4 on p.5-6).

5.4 For example, for claims 11 and 19 note that clustering in order to identify similar data items (e.g. songs) is a common general knowledge in data mining and retrieval, known to be used for playlist generation (cf. e.g. D6 abstract, §2.4 on p.3-4 or D7 p.11 l.20 - p.12 l.5 ff.).

## PATENT COOPERATION TREATY

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see form h	CT/ISA/220		INTERNATIONAL SEARCHING AUTHORITY		
			(P	CT Rule 43bis.1)	
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Applicant's or agent's file	reference		FOR FURTHER A See paragraph 2 belov	CTION	
see form PCT/ISA/2:		International filing date (d		Priority date (day/month/year)	
International application		17.01.2005	aymiomay car,	20.01.2004	
PCT/B2005/050183		·	and IPC		
International Patent Clas G06F17/30	sitication (IPC) or	both national classification		•	
Applicant KONINKLIJKE PHI	IPS ELECTR	ONICS, N.V.		1	
<ul> <li>☑ Box No. I Basis of the opinion</li> <li>☑ Box No. II Priority</li> <li>☐ Box No. III Non-establishment of opinion with reduced in the properties of the priority of Invention</li> <li>☑ Box No. IV Lack of unity of Invention</li> <li>☑ Box No. V Reasoned statement under Rule 43 applicability; citations and explanation of the International application of the International opinion of the International Preliminary examination written opinion of the International Preliminary Examination applicant chooses an Authority other than this on International Bureau under Rule 66.1 bis(b) that written</li> </ul>			is.1(a)(i) with regard to ns supporting such sta oplication onal application s made, this opinion w ing Authority ("IPEA")	novelty, inventive step or Inc tement  III usually be considered to be However, this does not apply	dustrial e a v where
will not be so considered.  If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to If this opinion is, as provided above, considered to be a written opinion of the IPEA a written reply together, where appropriate, with amendments, before the expiration of three submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 22 months from the priority date, months from the priority date, whichever expires later.  For further options, see Form PCT/ISA/220.					
3. For further de	tails, see notes	to Form PCT/ISA/220.			
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# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050183

	Box N	
1.	the lar	egard to the language, this opinion has been established on the basis of the international application in Iguage in which it was filed, unless otherwise indicated under this item.
	□ TI	nis opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search and 23.1(b)).
2.	With r	egard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of:
	a. typ	e of material:
		a sequence listing
		table(s) related to the sequence listing
	b. for	mat of material:
		in written format
		in computer readable form
	c. tim	e of filling/furnishing:
		• • • •
		furnished subsequently to this Authority for the purposes of search.
;	3. 🏻	In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
	4. Add	itional comments:
	Box	No. II Priority
	1. 🖾	The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43bis.1 and 64.1) is the claimed priority date.
	2. 🗆	This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
	3. Ad	ditional observations, if necessary:

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IB2005/050183

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-20

No:

Claims

Inventive step (IS)

Yes: Claims No:

Claims :

Industrial applicability (IA)

Yes: Claims

1-20

1-20

Claims No:

2. Citations and explanations

see separate sheet

#### Re Item V.

- Reference is made to the following document: 1
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- D3: US-A-5 616 876 (CLUTS ET AL) 1 April 1997 (1997-04-01)
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- D6: PAUWS S ET AL: "PATS: Realization and User Evaluation of an Automatic Playlist Generator" PROCEEDINGS OF 3RD INTERNATIONAL CONFERENCE ON MUSIC INFORMATION RETRIEVAL (ISMIR 2002), PARIS, FRANCE, 13 October 2002 (2002-10-13), - 17 October 2002 (2002-10-17) pages 1-9, XP002325429 INSTITUT DE RECHERCHE ET COORDINATION ACOUSTIQUE ET MUSIQUE IRCAM CENTRE POMPIDOU, PARIS, FRANCE
- D7: WO 01/90926 A (NAPSTER, INC) 29 November 2001 (2001-11-29)

#### INDEPENDENT CLAIM 1 2

- The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not inventive in the sense of Article 33(3) PCT. Document D1, regarded as the closest prior art, discloses (the references in parentheses applying to this document):
  - A system comprising:
  - a playlist generator that is configured to create a playlist (see "generation of track lists" in §211 l.1-4), and includes:
  - an artist similarity module that is configured to identify one or more similar artists to an identified artist to create an artist list (see §92, §117 l.9-11, §143 last four

lines, §211, §213 last two lines, §252, §257-§260, fig.11), and

- b) an item selector, that is configured to:
  - select a selected item associated with the similar artist from a source of items (see §92 l.12-15, §143 last four lines, §213 last two lines), and
  - include an identifier of the selected item in the playlist (as required in order to "generate the track lists" according to §211 I.1-4, as immediately and unambiguously derived by the skilled person).
- 2.2 The only difference between the disclosure of D1 and the subject-matter of claim 1 is that D1 does not explicitly teach "an artist selector (...) configured to select a selected artist from the artist list", and in consequence that tracks of the "selected artist" are selected in step b).
- 2.3 The problem to be solved by the present invention may therefore be regarded as how to constrain the set of results (recommended similar artists) searched and presented by the system of D1 (cf. §252, fig.11) to a reasonably small subset of artists being of real interest to the user.
- 2.4 The feature of providing a selector in the user interface to enable choosing from the list displayed (cf. fig. 11) in order to solve the said problem is a common general knowledge in the art. The skilled person would therefore regard it as a normal design option to include this feature in the system described in document D1 in order to solve the problem posed.

  The subject-matter of claim 1 does therefore not meet the requirements of Article 33 (1)
  - The subject-matter of claim 1 does therefore not meet the requirements of Article 33 (1) (3) PCT in respect of inventive step.
- 2.5 For the sake of completeness, it is pointed out that documents D2 and D3 disclose similar features and lack of inventive step of claim 1 could be also demonstrated using any one of said documents as the closest prior art.
- 3 INDEPENDENT CLAIM 13

Independent claim 13 contains only corresponding features to claim 1 and therefore it does not meet the requirements of Article 33 (1) (3) PCT in respect of inventive step for the same reasons as stated above.

## 4 INDEPENDENT CLAIMS 1, 13 AS IMPLEMENTATION OF HUMAN BEHAVIOUR

For the sake of completeness, it is pointed out that the method of claim 13 is anticipated by the known human practice of building a playlist (e.g. of MP3 tracks) manually, with usage of the memory (knowledge) of similar artists of the human being "executing" said method/practice and perhaps well known tools to search songs by author/title and add them to a playlist.

The current wording of claim 13 does not comprise any limitation as to automatic implementation of said method (e.g. in a computer). Consequently, its entirely manual execution falls in scope of said wording, thus anticipating it and even raising doubts as to the novelty of claimed subject matter (Article 33 (1)-(2) PCT).

However, even if said wording is interpreted as a computer-implemented method, a mere idea of automating human behaviour does not involve inventive step (Article 33 (1) (3) PCT). The same reasoning could be applied, mutatis mutandis, to the independent claim 1.

#### 5 DEPENDENT CLAIMS 2-12, 14-20

- 5.1 The dependent claims 2-12, 14-20 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of Article 33(3) PCT in respect of inventive step, since these features are either known from or suggested by the prior art (cf. D1, D3, D4, D5) and/or specify merely common knowledge in the technical field.
- 5.2 For example, for claims 8, 9, 16, 17, consider the "matching closeness indicator" implemented as a slider in D3 col.16 l.5-15 and col.17 l.50 col.18 l.43.
- 5.3 For example, for claims 10 and 18 consider the "flexibility knob/slider" of D4 (see p.1

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International application No.

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1.17- p.2 l.4) or the "AHA slider" of D5 (see §3.4.2 on p.4-5 and §4 on p.5-6).

5.4 For example, for claims 11 and 19 note that clustering in order to identify similar data items (e.g. songs) is a common general knowledge in data mining and retrieval, known to be used for playlist generation (cf. e.g. D6 abstract, §2.4 on p.3-4 or D7 p.11 l.20 - p.12 l.5 ff.).